NAS Enterprise Architecture



Infrastructure Roadmaps v19.0

BASELINE

February 2025



Infrastructure Roadmap Overview

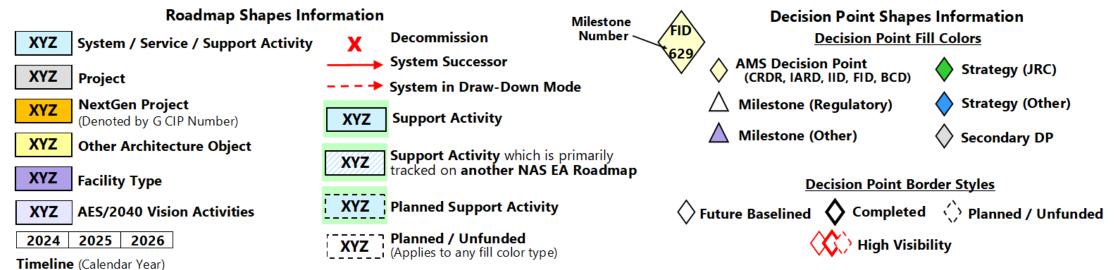
What are the Infrastructure Roadmaps?

- The FAA Infrastructure Roadmaps show the progression of system deployments, investments, and key decision points for major NAS acquisitions. They depict the acquisition strategy to evolve the NAS from the As-Is to the To-Be environment.
- The Infrastructure Roadmaps show all <u>Capital Investment Plan (CIP)</u> investment projects and systems identified in the NSIP that will deliver the necessary functionality to enable OIs and BTIs.

Guidelines for Understanding the Roadmaps

- The Infrastructure Roadmaps are organized by Domain (Automation, Communication, etc.) and depict projects, systems, services, decision points, and support activities.
- The timeline is in calendar years and shows a 17-year outlook.
- The roadmaps have swim lanes for Infrastructure (white), Support Activities (green), and Platform/Compute (purple).
- The DP diamonds represent the quarter in which a decision will occur.
- The Support Activity bars represent the dates that work is being performed on the activity.
- The Project bars represent the dates that CIP funding is allocated to a project.
- The System and Service bars represent the dates that a system or service is operational, with red lines indicating sustainment, drawdown, or convergence

Infrastructure Roadmap Legend



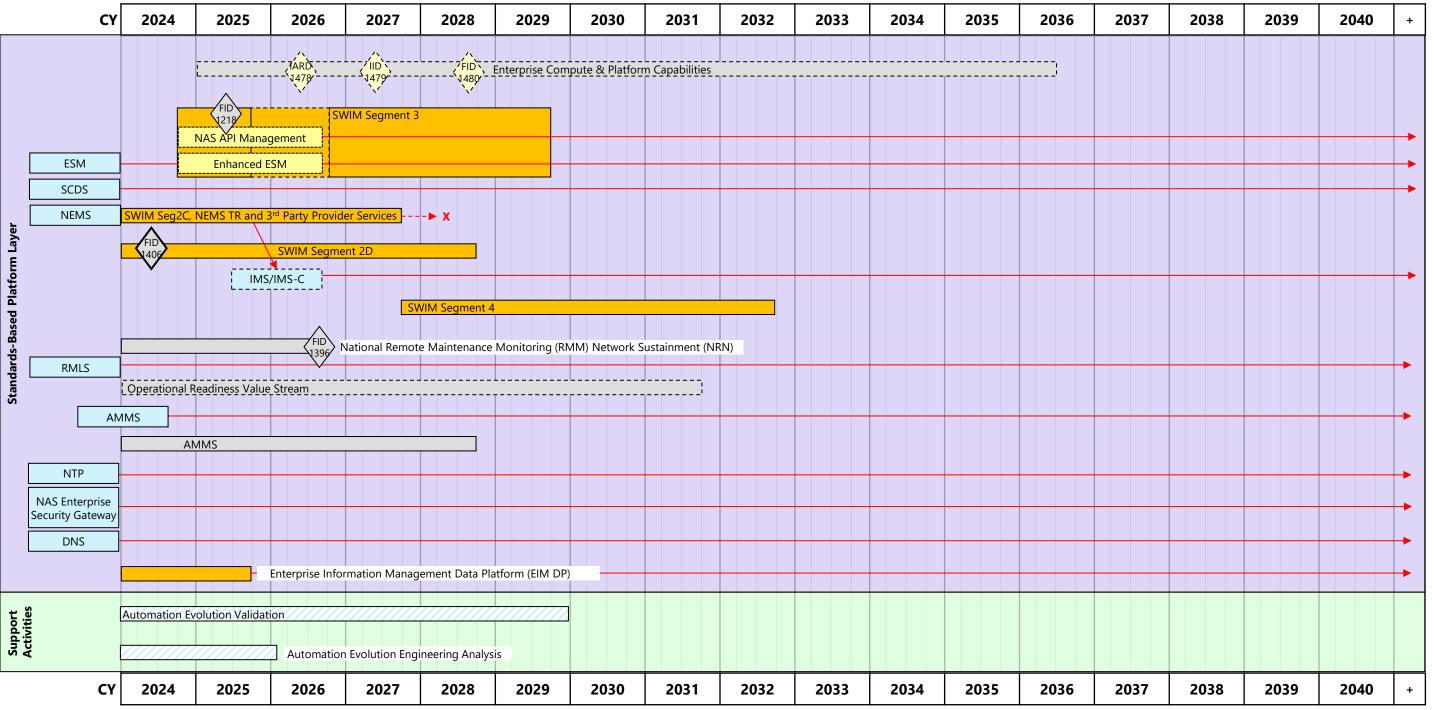
Enterprise Services & Capabilities

The Enterprise Services and Capabilities Roadmap presents an Executive View (EV) of the evolution of existing and planned enterprise services provided by NAS systems and programs and provides an outline of the major activities, decisions, and milestones. By definition, services are capabilities that exist as processes, applications, infrastructure, or any combination. They are implemented using design principles that support and promote enterprise-wide interoperability, sharing, standardization, federation, awareness, loose coupling, granularity, modularity, abstraction, reuse, and flexibility. Enterprise Services in the Automation Evolution Strategy (AES) architecture is defined as a service created for standardized use across the FAA. It includes services that provide common functionality where there is a significant benefit to the organization for all to adopt.

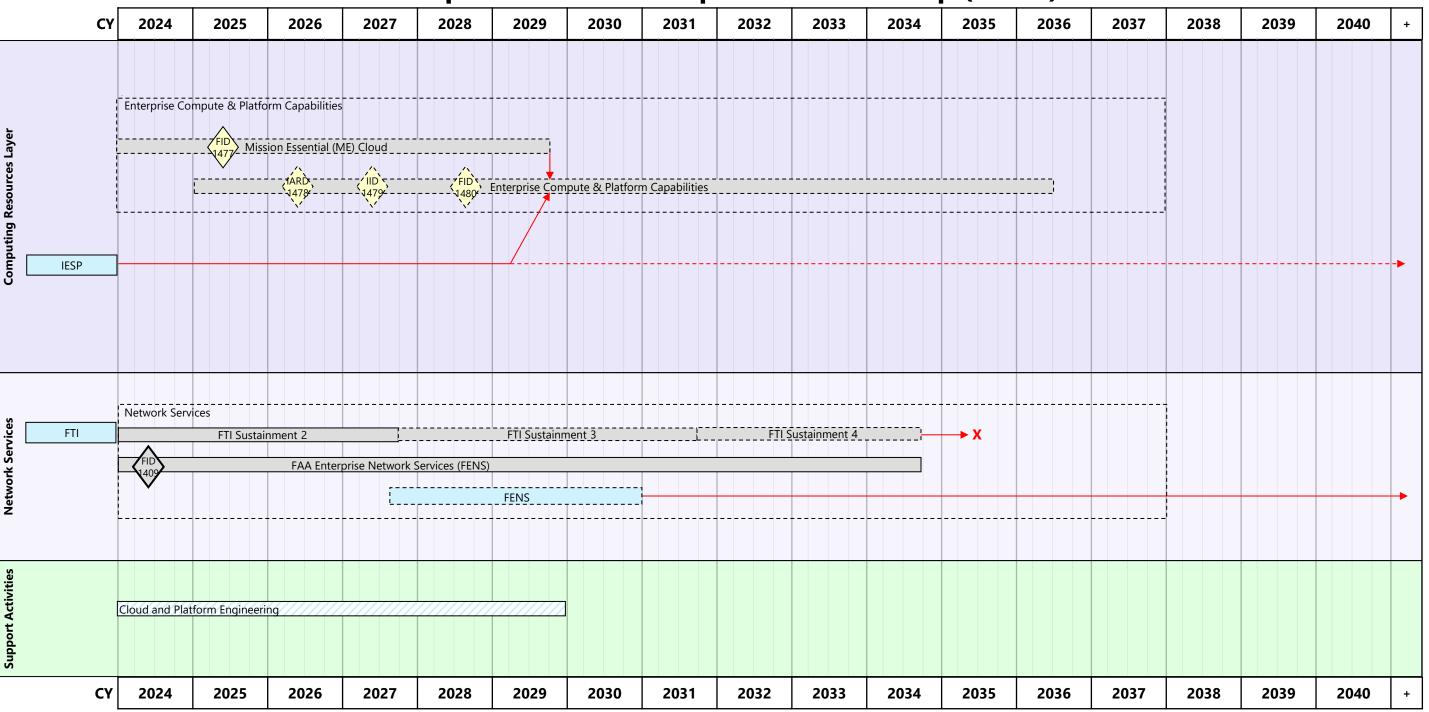
The Enterprise Services & Capabilities Roadmap is organized around the following Automation Evolution Strategy (AES) layers: Standards-Based Platform and Computing Resources. Additional layers may be considered during the next update cycle.

- The Standards-Based Platform Layer include services that deliver specific software or middleware component that are made available for use in creating, deploying, and operating mission software. It provides Frameworks & Environments and Enterprise Infrastructure Services (e.g. security event information management, cyber, monitoring/logging, identity access management, data encryption, and back-up & restore).
- The Computing Resources Layer includes services that provide components of the computing infrastructure needed to run platform and/or mission software. It provides End User equipment (e.g. workstations and monitors), Computing Infrastructure Components (e.g. cloud & on-prem, routers, switches, servers, disk storage).

Enterprise Services & Capabilities Roadmap (1 of 2)



Enterprise Services & Capabilities Roadmap (2 of 2)



Enterprise Services & Capabilities Roadmap: Decision Points (1 of 1)

| DP# | Target Date CY | Primary Domain | Туре | Name |
|------|-------------------|---------------------------------------|------|--|
| 1396 | 2026 Q3 | Automation | FID | Final Invesment Decision (FID) for National RMLS Network Sustainment |
| 1406 | 2024 Q2 | Communication | FID | Final Investment Decision (FID) for SWIM Segment 2D |
| 1477 | 2025 Q2 | Enterprise Services & Capabilities | FID | Final Investment Decision (FID) for Mission Essential (ME) Cloud |
| 1478 | 2026 Q2 | Enterprise Services & Capabilities | IARD | Investment Analysis Readiness Decision (IARD) for Enterprise Compute & Platform Capabilities |
| 1479 | 2027 Q2 | Enterprise Services & Capabilities | IID | Initial Investment Decision (IID) for Enterprise Compute & Platform Capabilities |
| 1480 | 2028 Q3 | Enterprise Services & Capabilities | FID | Final Investment Decision (FID) for Enterprise Compute & Platform Capabilities |